alcohol discovered by Brodie in beeswax, and named by him melissic alcohol. By analysis of the alcohol it is not possible to distinguish between $C_{30}H_{62}O$ (Brodie) and $C_{31}H_{64}O$, but analysis of the iodide shows that the true composition is the latter. This has been confirmed by the preparation of the hydrocarbon $C_{31}H_{64}$, and by other reactions.—Ph. **Glangeaud**: The geyser of Martres d'Artières (Puy-de-Dome). In Iceland the motive power of the geysers is steam; that of the Martres geyser is shown to be carbon dioxide.—L. **Gentil**: The mode of formation of terraces in chalk districts. A discussion of the views of Poulett Scrope. While these are in part in accord with the views of the author, it is maintained that these terraces can be formed by purely natural agencies, and are not in all cases due to ploughing, as supposed by Poulett Scrope.—H. **Vallois** and A. **Peyron**: The first stages in the development of the coccygian glomerule in man.—A. **Krempf**: Extension of the notion of oro-aboral metamerism to the internal organisation of the larva of the hexacorals (*Pocillopora cespitosa* and *Seriotopora subulata*).—MM. **Diénert** and **Girault**: The action of activated sludge on the ammonia of sewage and of ordinary water.—R. **Legroux** and J. **Mesnard**: Vitamines for the culture of bacteria. The current view that the growth of bacteria in a culture medium stops owing to the inhibiting action of deleterious substances is held by the author to be incorrect. Most media derived from animal or plant tissues contain more or less substances (hormones) favouring bacterial growth.—A. **Paillot**: The polymorphism of bacteria.—S. **Giaya**: Zinc in the human organism. The normal presence of zinc in the body is proved, the proportion increasing with the age of the subject.

Books Received.

Invertebrate Palæontology. By H. L. Hawkins. Pp. xix+226+xvi plates. (London: Methuen and Co., Ltd.) 6*s*. 6*d*. net.

Chemical Fertilizers and Parasiticides. By S. H. Collins. Pp. xii+273. (London: Baillière, Tindall, and Cox.) 10*s*. 6*d*. net.

The Coolidge Tube: Its Scientific Applications, Medical and Industrial. By H. Pilon. Translated. Pp. v+95. (London: Baillière, Tindall, and Cox.) 7*s*. 6*d*. net.

Lad: A Dog. By A. P. Terhune. Pp. 309. (London: J. M. Dent and Sons, Ltd.) 6*s*. net.

Industrial Administration. By A. E. Berriman and others. Pp. vii+203. (Manchester: At the University Press; London: Longmans and Co.) 7*s*. 6*d*. net.

Scientific Management in the Home: Household Engineering. By Mrs. C. Frederick. Pp. 527. (London: G. Routledge and Sons, Ltd.) 12*s*. 6*d*. net.

Bibliography of Industrial Efficiency and Factory Management. By H. G. T. Cannons. Pp. viii+167. (London: G. Routledge and Sons, Ltd.) 10*s*. 6*d*. net.

The House-fly: Its Life-History and Practical Measures for its Suppression. By Major E. E. Austen. Pp. 52. (London: British Museum (Natural History).) 1*s*. 6*d*. net.

A National System of Education. Pp. 78. (Manchester: At the University Press; London: Longmans and Co.) 1*s*. net.

Physiography. By Prof. R. D. Salisbury. Third edition. Pp. xv+676+26 plates. (New York: Henry Holt and Co.)

Early English Magic and Medicine. By Dr. C. Singer. Pp. 34. (London: Oxford University Press.) 4*s*. net.

Committee of the Institution of Civil Engineers appointed to Investigate the Deterioration of Structures of Timber, Metal, and Concrete exposed to the Action of Sea-water. First Report of the Committee. Edited by P. M. Crosthwaite and G. R. Redgrave. Pp. 301+33 plates. (London: Institution of Civil Engineers). 30*s*. net.

The Columbian Tradition on the Discovery of America and of the Part Played Therein by the Astronomer Toscanelli. By H. Vignaud. Pp. 62. (Oxford: At the Clarendon Press.) 3*s*. 6*d*. net.

Silver: Its Intimate Association with the Daily Life of Man. By B. White. Pp. xi+144. (London: Sir Isaac Pitman and Sons, Ltd.) 2*s*. 6*d*. net.

Spanish Prose and Poetry: Old and New, with Translated Specimens. By I. Farnell. Pp. 185. (Oxford: At the Clarendon Press.) 10*s*. 6*d*. net.

Hydrographical Surveying. By the late Rear-Admiral Sir W. J. L. Wharton. Fourth edition, revised and enlarged, by Admiral Sir Mostyn Field. Pp. xii+570. (London: John Murray.) 30*s*. net.

Psychology and Folk-lore. By Dr. R. R. Marett. Pp. ix+275. (London: Methuen and Co., Ltd.) 7*s*. 6*d*. net.

The Atlas Geographies. Part iii. Senior Geography. No. 2: Europe. Pp. iv+148. (Edinburgh: W. and A. K. Johnston, Ltd.; London: Macmillan and Co., Ltd.) 7*s*. 6*d*. net.

A Handbook of British Mosquitoes. By Dr. W. D. Lang. Pp. vii+125+5 plates. (London: British Museum (Natural History).) 20*s*.

Flora of Jamaica. Vol. iv. By W. Fawcett and Dr. A. B. Rendle. Pp. xv+369. (London: British Museum (Natural History).) 25*s*.

Catalogue of the Lepidoptera Phalænæ in the British Museum. Supplement. Vol. ii. By Sir G. F. Hampson. Pp. xxiii+619. (London: British Museum (Natural History).) 30*s*.

Arithmetic. Part 2. By F. W. Dobbs and H. K. Marsden. Pp. xii+163+xi. (Answers.) (London: George Bell and Sons, Ltd.) 3*s*. 6*d*.

Elementary Algebra. Part 1. By C. V. Durell and G. W. Palmer. Pp. viii+256+viii. (Answers.) (London: George Bell and Sons, Ltd.) 3*s*. 6*d*.

Le Parc National Suisse. By S. Brunies. Traduit par S. Aubert. Pp. 274. (Bâle: B. Schwabe et Cie.) 12 francs.

Die Gliederung der Australischen Sprachen. By P. W. Schmidt. Pp. xvi+299. (St. Gabriel-Mödling, bei Wien: "Anthropos.")

An Introduction to Sociology. By Prof. J. J. Findlay. Pp. xi+304. (Manchester: At the University Press; London: Longmans and Co.) 6*s*. net.

Diary of Societies.

THURSDAY, MAY 6.

IRON AND STEEL INSTITUTE (at Institution of Civil Engineers) (General Meeting), at 10 a.m.—Dr. J. E. Stead: Inaugural Address.—E. H. Lewis: Iron Portland Cement.—At 2.30.—F. Clements: British Blast-Furnace Practice.—H. E. Wright: Chemical and Thermal Conditions in Blast-Furnace Practice.—C. H. Ridsdale: The Valuation of Ores and Iron-making Material.—J. A. Heskett: The Utilisation of Titaniferous Iron Ore in New Zealand.

ROYAL SOCIETY OF MEDICINE (Obstetrics and Gynæcology Section, conjointly with the North of England and Midland Obstetrical and Gynæcological Societies), at 10.30 a.m.—Dr. H. Tweedy and Others: Discussion on The Treatment of Antepartum Hæmorrhage.—At 2.—Dr. E. Holland and Others: Discussion on Rupture of Cæsarean Section Scar in Subsequent Pregnancy or Labour.

ROYAL INSTITUTION OF GREAT BRITAIN, at 3.—R. Campbell Thompson: The Legends of the Babylonians.

ROYAL SOCIETY, at 4.30.—R. H. Fowler, E. C. Gallop, C. N. H. Lock, and H. W. Richmond: The Aerodynamics of a Spinning Shell.—Prof. W. E. Dalby: Researches on the Elastic Properties and the Plastic Extension of Metals.—C. T. R. Wilson: Investigations on Lightning Discharges and on the Electric Field of Thunderstorms.—L. F. Richardson: The Supply of Energy to Atmospheric Eddies.

LINNEAN SOCIETY OF LONDON, at 5.—Dr. G. P. Bidder: Notes on the Physiology of Sponges. *Pandorina spongiarum*, a New Species of Alga found in a Sponge.—E. J. Bedford: The British Marsh Orchids and their Varieties, Illustrated by Coloured Drawings and Lantern Slides.

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Chemical Society, at 8.—G. M. Bennett: The Mustard Gas Problem.—C. K. Ingold: A New Method of Preparing Muconic Acid.—J. W. Cook and O. L. Brady: The Dinitration of *m*-Acetotoluidide.—Y. Venkataramayya and M. V. Narasimhaswamy: A New Ozoniser.—G. T. Morgan and H. D. K. Drew: Orthochlorodinitrotoluenes. Part I.

Society of Antiquaries, at 8.30.

FRIDAY, May 7.

Iron and Steel Institute (at Institution of Civil Engineers) (General Meeting), at 10 a.m.—C. A. Ablett: Direct Current compared with Three-Phase Current for Driving Steel Works Plant.—J. F. Wilson: Notes on Slag Conditions in Open-hearth Basic Steelmaking Practice.—B. Yaneske and G. A. Wood: The Reduction of Silicon from the Slag in the Acid Open-hearth Process.—At 2.30.—W. E. Hughes: Some Defects in Electro-deposited Iron.—T. Baker and F. R. Russell: Note on the Ball Test.—J. H. Whiteley: The Distribution of Phosphorus in Steel between Points Ac_1 and Ac_3.—G. F. Preston: Practical Notes on the Design and Treatment of Steel Castings.

Royal Society of Medicine (Laryngology Section), at 4.45.—Annual General Meeting.

Royal Astronomical Society (Geophysical Discussion), at 5.—Prof. R. A. Sampson and Others: The Use of Wireless Telegraphy in the Determination of Longitude.

China Society (at School of Oriental Studies), at 5.30.—G. S. Boulger: The History of Silk.

Junior Institution of Engineers, at 7.30.—J. G. McBryde: Pulverised Fuel.

Philological Society (at University College), at 8.—Anniversary.

Royal Institution of Great Britain, at 9.—Lord Rayleigh: The Blue Sky and the Optical Properties of Air.

SATURDAY, May 8.

Royal Institution of Great Britain, at 3.—Dr. F. Chamberlin: The Private Character of Queen Elizabeth.

British Psychological Society (at Bedford College), at 3.30.—Dr. E. W. Scripture: Speech Inscriptions in Normal and Abnormal Conditions.—A. Klein: Camouflage in Land Warfare.

MONDAY, May 10.

Royal Geographical Society (at Lowther Lodge, Kensington Gore), at 5.—G. Dobson: Instruments for the Navigation of Aircraft.

Biochemical Society (at Chemical Department, St. Bartholomew's Hospital), at 5.30.—T. S. Hele: The Synthesis of Mercapturic Acids in the Dog.—R. L. Mackenzie Wallis and H. E. Archer: Improved Methods of Analysis of the Gastric Juice.—G. Graham: The Source of the Uric Acid Excreted in the Urine after Atophan.

Royal Society of Medicine (War Section), at 5.30.—Annual General Meeting.—Surg.-Capt. Bassett-Smith: Scurvy, with Special Reference to Prophylaxis in the Royal Navy.

Aristotelian Society (at 74 Grosvenor Street), at 8.—Prof. H. Wildon Carr and Others: Discussion on Bergson's "Mind-Energy."

Royal Society of Arts, at 8.—A. T. Bolton: The Decoration and Architecture of Robert Adam and Sir John Soane, 1758-1837 (Cantor Lecture).

Institution of Mechanical Engineers (Graduates' Association), at 8.—E. B. W. Maitland: Chemistry as applied to Boilers.

Medical Society of London (General Meeting), at 8.—At 9.—Sir D'Arcy Power: Rev. John Ward and Medicine (Annual Oration).

Surveyors' Institution, at 8.—S. A. Smith: Rent Problems.

TUESDAY, May 11.

Royal Horticultural Society, at 3.—Sir Daniel Morris: The Use and Relative Value of Trees in Great Britain.

Royal Institution of Great Britain, at 3.—Prof. A. Keith: British Ethnology: The Invaders of England.

Zoological Society of London, at 5.30.—Dr. W. J. Dakin: Fauna of Western Australia. III. Further Contributions to the Study of the Onychophora.—C. Forster-Cooper: Chalicotheroidea from Baluchistan.—Dr. W. T. Calman: Notes on Marine Wood-boring Animals. I. The Shipworms (Teredinidæ).

Royal Photographic Society of Great Britain, at 7.—Prof. A. Findlay: Some Properties of Colloidal Matter and their Applications in Photography (Second Biennial Hurter and Driffield Memorial Lecture).

Quekett Microscopical Club (at 20 Hanover Square), at 7.30.

Illuminating Engineering Society (at Royal Society of Arts), at 8.15.—Annual Meeting.—Capt. J. W. Barber: Recent Developments in Portable Types of Cinema Outfits.

WEDNESDAY, May 12.

Royal Society of Arts, at 4.30.—G. Hewitt: Rolls of Honour.

Royal Aeronautical Society (at Royal Society of Arts), at 8.—Major L. Hope: Some Notes on Flying-boats.

British Psychological Society (Education Section) (at London Day Training College), at 8.—H. Gordon: Left-handedness and Mental Deficiency.

THURSDAY, May 13.

Royal Institution of Great Britain, at 3.—A. P. Graves: Welsh and Irish Folk Song.

Royal Society, at 4.—Election of Fellows.—*Probable Papers.*—Dr. A. D. Waller: Demonstration of the Apparent "Growth" of Plants (and of Inanimate Materials) and of their Apparent "Contractility."—W. N. F. Woodland: The "Renal Portal" System (Renal Venous Meshwork) and Kidney Excretion in Vertebrata.

London Mathematical Society, at 5.

Institution of Electrical Engineers (at Institution of Civil Engineers), at 6.—S. Evershed: Permanent Magnets in Theory and Practice.

Optical Society, at 7.30.

Institution of Automobile Engineers (Graduates' Section) (at 28 Victoria Street), at 8.—W. E. Benbow: The Chemical and Physical Properties of Iron and Steel.

Royal Society of Medicine (Neurology Section), at 8.30.—Annual General Meeting.—Dr. S. A. K. Wilson: Decerebrate Rigidity in Man, and the Occurrence of Tonic Fits.

FRIDAY, May 14.

Royal Astronomical Society, at 5.

Royal Society of Medicine (Clinical Section), at 5.—Annual General Meeting.

Physical Society of London, at 5.—Dr. F. Lloyd Hopwood: Demonstration of Experiments on the Thermionic Properties of Hot Filaments.—G. D. West: A Modified Theory of the Crookes Radiometer.—A. Campbell: The Magnetic Properties of Silicon-Iron (Stalloy) in Alternating Fields of Low Value.—T. Smith: Tracing Rays through an Optical System.

Malacological Society of London (at Linnean Society), at 6.

Institution of Electrical Engineers (Students' Meeting) (at King's College), at 7.—E. G. Humfress: Electrical Motor Control Devices.—The Meeting will be preceded by the Annual General Meeting.

Royal Institution of Great Britain, at 9.—Prof. Karl Pearson: Sidelights on the Evolution of Man.

SATURDAY, May 15.

Royal Institution of Great Britain, at 3.—Frederic Harrison: A Philosophical Synthesis as proposed by Auguste Comte.

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Editorial and Publishing Offices:
MACMILLAN AND CO., Ltd.,
ST. MARTIN'S STREET, LONDON, W.C.2.

Advertisements and business letters to be addressed to the Publishers.

Editorial Communications to the Editor.
Telegraphic Address: Phusis, London.
Telephone Number: Gerrard 8830.

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